

5. Non-Infrastructure Recommendations

Of the Six Es of bicycle planning, four are related to programs: encouragement, education, enforcement and evaluation. Bicycle-related policies can affect each of the Six Es, but are primarily used as an evaluation and planning tool. Programs will complement engineering improvements such as bike paths, lanes and routes by giving Greenville residents the tools they need to safely and confidently use the bikeway network. The following four vision statements of the Greenville Bicycle Master Plan are particularly relevant to the development and implementation of programs and policies:

- **Education:** Community understanding and respect for the roles and responsibilities of cyclists
- **Encouragement:** Increase bicycle ridership and foster the creation of a strong bicycle advocacy community and bicycle culture.
- **Enforcement:** A safer environment for cyclists and other transport modes
- **Evaluation & Planning:** Institutional support and collaboration for bicycling

All of the Six Es work together to enhance the bicycling experience in Greenville. The following section presents recommended programs and policies to support the vision and goals of this plan. The recommendations include continuation of those administered by the City and other area agencies and organizations and those identified by the community, as well as additional programs that have proven to be popular and effective in other bicycle-friendly cities.

5.1. Existing Program Resources

Greenville's recommended bikeway network should be complemented by programs and activities designed to promote bicycling. There are many existing efforts to promote bicycling in Greenville, several that are provided by local agencies, active community groups and individual residents. The Bicycle Master Plan recognizes these efforts and encourages Greenville to support, promote and build upon these efforts.

5.1.1. Maps, Materials, and Webpages:

Greenville offers several bicycling-focused online and print resources. However, the breadth of educational materials and maps for bicyclists is limited.

- Bikeville tri-fold brochure
- Swamp Rabbit Trail Map (available for print, online)
- Bikeville Website: <http://www.bikeville.org>
- City Trails & Greenways Program Website: <http://www.greenvillesc.gov/ParksRec/Trails/>
- Upstate SORBA Website: <http://www.upstatesorba.org/>
- Greenville Spinners Website: <http://www.greenvillespinners.org/>

5.1.2. Bicycle Shops

Each of the bicycle shops in Greenville serves as a primary resource for information related to bicycling.¹ They offer occasional bike mechanic clinics. Several shops host events and/or group rides on a regular basis.

5.1.3. Sport Clubs and Racing Teams

Several local bicycling clubs have activities aimed at encouraging women riders and young racers. A few of these activities include classes and rides aimed at inexperienced cyclists, but most are designed for experienced riders.²

- Greenville Spinners Bicycle Club³: road bicycling club
- GS Elan Women's Cycling (Greenville Spinners): women's bicycling club
- Upstate SORBA (Southern Off-Road Bicycle Association): off-road bicycling club
- Greenville Spinners Racing Team: competitive road cycling team
- Trailblazer Adventure Racing Team: competitive mountain bike racing team
- Greenville Women's Cycling Team: competitive women's road cycling team
- TEAM Headstrong: competitive road cycling team
- Team Inertia Racing: competitive mountain bike racing team
- Piedmont Orthopedic Associates (POA) Cycling Team: competitive road cycling team
- Les Amis: amateur competitive road cycling team, includes junior racing
- Donne Pedala: competitive women's road cycling team

5.1.4. Organizations and Coalitions

There are a number of existing nonprofit organizations and community coalitions that support active living, outdoor recreation, and/or active transportation. These entities can serve as key partners for bicycling programs.

- Bikeville: a volunteer coalition representing the City of Greenville's bicycle friendly community initiative, with a goal to “increase ridership, encourage bicycle use, expand bicycling facilities, and provide useful educational resources to cyclists and motorists to share the road.” Resource: <http://www.bikeville.org>
- Greenville Spinners Bicycle Safety Foundation: an all-volunteer nonprofit group, which partners with the Greenville Spinners to raise funds for helmets and bicycle safety workshops. Resource: http://www.greenvillespinners.org/content.aspx?page_id=22&club_id=296060&module_id=40433
- Upstate Forever: membership-based nonprofit organization headquartered in Greenville that promotes sensible growth in the ten-county Upstate region of South Carolina. Resource: www.upstateforever.org

¹ Nearly every stakeholder interviewed for this plan noted the importance of bicycle shops as a source of local bicycling information.

² Online resource: <http://carolinacyclingnews.com/resources/clubs/>

³ Community members indicated that both the online group “E-Ride” and the neighboring Freewheelers of Spartanburg cycling club are accessible to Greenville bicyclists as well.

- LiveWell Greenville: a “partnership of dozens of public and private organizations that aims to make Greenville County a healthier place to live, work, and play.” Resource: www.livewellgreenville.org
- YMCA of Greenville: a nonprofit organization offering “programs that promote good health, strong families, youth leadership and community and international understanding.” Resource: www.ymcagreenville.org
- Palmetto Conservation Foundation: a statewide nonprofit organization with a mission “to conserve South Carolina's natural and cultural resources, preserve historic landmarks, and promote outdoor recreation through trails and greenways.” Resource: www.palmettoconservation.org
- Palmetto Cycling Coalition: a statewide nonprofit organization with a mission to make South Carolina bicycle friendly for everyone. Resource: www.pccsc.net

5.2. Program Recommendations

5.2.1. Encouragement

The following programs are designed to encourage community member to ride bicycles. Through the Greenville Bicycle Master Plan public outreach process, community members identified encouragement programs as a way to increase bicycling mode share and reach the goals outlined in this plan. The following section outlines recommended encouragement programs or enhancements to existing programs.

Bicycle Resource Website

The City of Greenville hosts a webpage for the bicycling coalition Bikeville on the city website. Visitors to the site can link to the webpage from the site's home page. The page includes dynamic (Google-administered) maps of bicycle facilities, signed bicycle routes, mountain bike trails, and the Swamp Rabbit Trail. Information about Bikeville, the Bicycle Master Plan, the Bicycle Friendly Community designation, the Bicycle Friendly Business program, local clubs and advocacy groups, and bicycle-related City ordinances is provided as well.

This resource would benefit from the following recommended improvements:

- Dynamic bike parking map
- Advertisement of all bikeways before and after implementation
- Bicycling tips for utilitarian cycling, including information on how to:
 - Carry items using baskets and panniers
 - Properly lock a bicycle
 - Ride in the rain with help from fenders and rain gear
 - Tips can also include information on the importance of bicycle lights and reflectors.
- Bikeway maintenance and repair phone number
- Speed feedback sign request forms



The City dedicates a page of its website to information about the Bicycle Friendly Community initiative.

- Bicycle events calendar
- Education and skill class information and an opportunity to request such a class
- Request form for route planning assistance or bike mentor requests
- Photo galleries, featuring photos from events and submitted by readers

A one-stop bike website is not difficult to create, but requires dedicated time and should be included in City employee's time and work program. It is important to note, however, that it will only be successful if the site is both easy to use and updated regularly. The bicycle community can assist in keeping the site up-to-date. The website of Upstate SORBA currently includes a comprehensive inventory of area mountain biking trails. The Greenville Spinners' website contains valuable information about weekly local rides and area events. The City should partner with these groups and others, to take advantage of existing online resources by linking to those sites, creating RSS feeds, or choosing other similar approaches to integration.

Bicycle Safety Campaign

A marketing campaign that highlights bicyclist safety is an important part of creating awareness of bicycling in Greenville. This type of high-profile campaign is an effective way to reach the public, highlight bicycling as viable forms of transportation, and reinforce safety for all road users.

A well-produced safety campaign will be memorable and effective. One good example is the Sonoma County Transit "You've got a friend who bikes!" campaign. It combines compelling ads with an easy-to-use website focused at motorists and bicyclists. This type of campaign is particularly effective when kicked off in conjunction with other bicycling events or at back to school time in the fall. The safety and awareness messages should be displayed near high-traffic corridors (e.g., on billboards), printed in local publications, and broadcast as radio and/or television ads.

This Plan recommends the City pursue grant funding to implement a bicycle safety campaign.

Sample program: Sonoma County (CA) Transit: <http://www.sctransit.com/bikesafe/bikes.htm>

Safe Routes to School Program

Helping children walk and bicycle to school is good for children's health and can reduce congestion, traffic dangers, and air pollution caused by parents driving children to school. Robust Safe Routes to School programs address all of the "Six Es" (Engineering, Education, Encouragement, Enforcement, and Evaluation, and Equity).

The City of Greenville should work with local school districts and SCDOT's Safe Routes to School (SRTS) Program to implement the first phase of a coordinated local SRTS Program. This phase will use a walkabout (also known as a bicycle and pedestrian audit) to assess walking and biking conditions of streets adjacent to elementary schools. Parents, students, neighbors, and city planners and/or traffic engineers should be invited to join in the walkabout. Safety concerns, issues, and ideas should be recorded.

After the bicycle and pedestrian audit is conducted, parent maps for each elementary school showing recommended routes to reach school, along with high-traffic intersections and routes to avoid, should be produced and distributed.

As a final step, an initial infrastructure improvement plan should be produced for each elementary school, including cost estimates and a prioritized project list. This infrastructure improvement plan will serve as a blueprint for future investments, and can be used to apply for further grant funding.

Resource Guide: National Center for Safe Routes to School: <http://www.saferoutesinfo.org/>



Safe Routes to School programs increase the number of children walking and biking to school and improve traffic safety near schools.

Host National Bike Month Activities

Bicycling to work or to other destinations is a great way to get exercise, save money, reduce pollution, and have fun. Cities and towns across the country participate in National Bike Month. The League of American Bicyclists (LAB) hosts a website for event organizers. The website contains information on nationwide and local events, an organizing handbook, and promotional materials.

The City of Greenville recognizes National Bike Month annually with activities such as:

- Valet Bicycle parking
- Bicycle Commuter Course
- Greenways Bike Tour
- Mountain Bike Skills Clinic and Trails Tour
- Ride of Silence
- Downtown Greenville Art Tour By Bike
- Bike-themed Outdoor Movies
- Bike Ride with Mayor
- Promotion of Bike to Work Day and Bike to Work Week

It is recommended that the City of Greenville continue and expand National Bike Month events and activities, with the support of local bicycling groups and shops. Expanded activities may include:

- Bike to Work Day events: morning-commute energizer stations with food, encouragement, information, and sponsored goodies for participants; rally or celebration with raffles, food, and vendors.
- Discounts at local businesses for bicycle commuters.
- Bike vs. Bus vs. Car challenge. This is a fun competition to determine which transportation mode arrives at the city center in the least amount of time.
- Commuter Challenge providing incentives for residents to commute to work. This can be implemented as either a business-based program or a city-wide initiative. As a business-based program, local companies participate by recording the number of employees who bike to work over a given time period. The percentage of bicycle commuters are then compared between participating companies and recognition is awarded through press, trophies or plaques, and a final award party or event. As a city-wide initiative, residents self-report their commuting mileage through an online program, such as WorldCommute.com.

Employer Based Encouragement Programs

In the Bicycle Master Plan survey, City of Greenville residents expressed an interest in employer-based bicycle encouragement programs. Greenville's Bicycle Friendly Businesses, Fluor, TTR Bikes, Great Escape Bicycle Shop, and Upstate Forever, already have programs in place to encourage bicycling.

Though the City cannot host these programs, it can work with or provide information to employers about commuting by bicycle. Popular employer-based encouragement programs include hosting a bicycle user group to share information about how to bicycle to work and to connect experienced bicyclists with novice bicyclists. Employers can host bicycle classes and participate in Bike to Work day. The City can also provide a model for local employers by initiating such programs in-house and encouraging County government staff to do the same.

This Plan recommends the City collaborate with employers to implement bicycle-related programs.

Sample program: Humana Freewheelin Program (Louisville, KY):

<http://trafficsafety.org/safety/sharing/bike/bike-initiatives/humana-freewheelin-program>

Promote a Bicycle Friendly Business Program

The Bicycle Friendly Business designation program of the League of American Bicyclists recognizes businesses who encourage bicycling among their employees and visitors. By implementing a local program to promote the national Bicycle Friendly Business designation, Greenville will encourage businesses to improve the integration of bicycling into their business model and offer resources to businesses as they do so. This program may include a bike-friendly business audit service; annual bike-friendly business honorable mention awards for businesses not yet ready for national designation; public recognition of nationally-designated bike-friendly businesses; staff time, expertise and/or financial support for building facilities and creating incentives; cash awards, credit at a bike shop, or in-kind bicycling items provided to businesses earning bicycle friendly status.

Through promotion of the national bicycle friendly business program, Greenville businesses will be encouraged to add or increase all or some of the following items, as well as supported in their efforts to do so:

- Outdoor bike racks
- Guaranteed Ride Home: Provide a free taxi ride home for bike commuters in the event of family emergency or other extenuating circumstances.
- Promotional information: Company provides bike information through company memo, e-newsletter, website, or brochure/poster display.
- Employee bike training session: Adult bike skills training sessions are available for a nominal fee through League of American Bicyclist certified instructors.
- Bike commuter incentives: Company provides incentives to bike commuters at the same value as those for other commuters.
- Bike Week team entry: Register a company team to participate in a Bike Commuter Challenge.
- Shower facilities: Company provides free showers to employees within own building or at neighboring buildings.
- Company owned bikes for work trips: Bikes (and helmets) available for employee work trips.
- Secure, covered bike parking: Qualified parking includes: secure indoor parking; outdoor covered parking with limited access; outdoor covered parking that is in view of security.

Sample Programs:

- Boston's Bike Friendly Business Program: http://www.cityofboston.gov/environmentalandenergy/greenawards/pdfs/greenawards08_bike.pdf
- Toronto's Bicycle Friendly Business Awards: http://www.toronto.ca/cycling/bfba/integrate_cycling.htm
- Portland retailer Rejuvenation: <http://bikeportland.org/2008/01/31/rejuvenation-hardware-launches-employee-bike-program/>

Car-Free Street Events

Car-free street events have many names: Sunday Parkways, Ciclovias, Summer Streets, and Sunday Streets. Sunday Parkways are periodic street "openings" ("open" to users besides just cars; usually on Sundays) that create a temporary park that is open to the public for walking, bicycling, dancing, hula hooping, roller-skating, etc. They have been very successful internationally and are rapidly becoming popular in the United States. Car-free street events promote health by creating a safe and attractive space for physical activity and social contact, and are cost-effective compared to the cost of building new parks for the same purpose. Events can be weekly events or one-time occasions, and are generally very popular and well attended.



Opening streets for a car-free community event creates a temporary park for walking, cycling, skating, dancing, etc.

During the Bicycle Master Plan public meetings the community identified interest in a Greenville car-free street event. This Plan recommends the City consider hosting a pilot car-free street event.

Sample Programs:

- Atlanta Streets Alive: <http://www.atlantabike.org/atlantastreetsalive>
- Vancouver LiveStreets: <http://www.livestreets.ca/>
- San Francisco Sunday Streets: <http://sundaystreetssf.com/>
- Oakland's Oaklavia <http://oaklavia.org/media>
- New York City Summer Streets:
<http://www.nyc.gov/html/dot/summerstreets/html/home/home.shtml>
- Portland Sunday Parkways: <http://portlandsundayparkways.org/>

Bicycle Sharing

A household's access to a bicycle is the strongest single predictor of bicycling for transportation.⁴ Bicycle sharing schemes offer one avenue for increasing opportunities for bicycle travel. In its most broad sense, bicycle sharing is a shared fleet of bicycles used for daily mobility. More recently, bike share systems have been identified by the "third generation" version, which uses smart technology to provide multiple, automated (un-manned) bicycle rental stations available to the public for short-term bicycle use.

The Nicholtown neighborhood (in partnership with LiveWell Greenville and Hope Baptist Church), the Caine Halter YMCA, and Leadership Greenville have each developed proposals for bicycle sharing programs. In concept, the Nicholtown program is intended to operate as a lending library, the YMCA program would operate as a rental service, and the Leadership Greenville project would function as a "third-generation" smart technology bike sharing system.



Bicycle share programs encourage bicycle ridership by ensuring that every household in the city has access to a bike.

This plan recommends that the City of Greenville serve as a leading partner in local bicycle sharing schemes. The City can provide a crucial role in seeking federal and state grants to assist in the implementation of such programs as well as permitting use of public right of ways, where appropriate, for bicycle sharing equipment.

⁴ Cervero, R. et al. (2009). Influences of built environments on walking and cycling: Lessons from Bogota. *International Journal of Sustainable Transportation*, 3(4), 203-226.

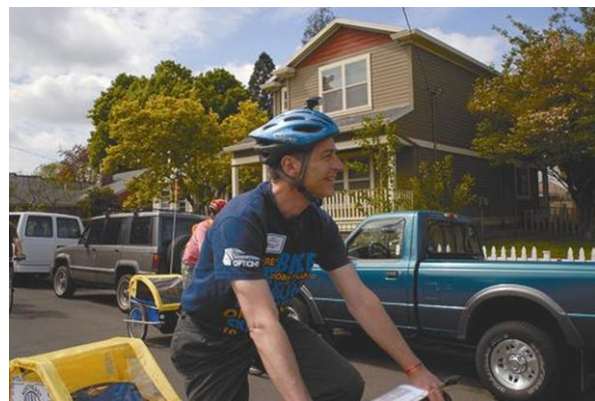
Sample programs:

The following programs represent the wide-range of bicycle lending programs that exist around the country. As evidenced by Greenville's current community-led bicycle sharing schemes, bike share programs can vary extensively in their cost, format, and target market.

- Iowa City Bike Library: <http://www.bikelibrary.org/>
- Fort Collins Bicycle Library: <http://www.fcgov.com/bicycling/library.php>
- Spartanburg Hub Cycle: <http://www.active-living.org/Hub-Cycle-2.html>
- Washington, D.C. Capital Bike Share: <http://www.capitalbikeshare.com/>

Personal Travel Encouragement Program

Personal Travel Encouragement (PTE) programs (also known as individualized social marketing programs) are encouragement programs based on saturating a target geographic area with resources to help residents reduce drive-alone trips and increase biking, walking, transit, and carpool trips. These programs have demonstrated a lasting reduction in drive-alone trips; for example, in Portland, OR, target areas have experienced a 10% reduction in motor vehicle traffic.



Maps and materials are delivered to interested residents by bike in this SmartTrips program

Programs offer residents maps, brochures and other printed materials, classes, guided rides and walks, and other tools and programs that make bicycling, walking, and transit usage a more inviting travel option compared to drive-alone trips.

Compared to infrastructure improvements, these programs are scalable, flexible, inexpensive, and site-independent. Once the program has been established for a specific geographic target area, it can be run with low start-up costs in other target areas.

One of the strengths of the individualized marketing model is that it reaches every resident with an appealing invitation to participate, but then focuses the bulk of resources on those who identify themselves as interested. The many classes, rides, and activities continue to be publicized and open to all, so residents have multiple opportunities to opt into the program. This focus allows for both broad reach and strategic investment.

This model is most successful in areas that have made initial infrastructure investments sufficient to provide a functional bicycling, walking, and transit network. It is most effective as an approach that leverages investments in infrastructure, not one that replaces those investments. With Greenville's fast-increasing bicycle facilities network, PTE could build the user base for that network and evidence local demand for such facilities.

This Plan recommends that the City of Greenville implement a pilot Personal Travel Encouragement program in a limited geographic area.

The program may include the following:

- Maps and brochures
- Classes, clinics, workshops
- Guided rides and walks
- Fun social events
- Giveaways (e.g., coupons, pedometers, etc.)
- Targeted outreach (e.g., Women on Bikes, Senior Strolls)
- Route planning help (bike, walking, or transit)

The exact program components and budget should be determined at time of program planning.

Sample program: Portland SmartTrips program:

<http://www.portlandonline.com/transportation/index.cfm?c=ediab>

5.2.2. Education

Education programs are designed to improve safety and awareness. Organizations such as SafeKids Upstate and Greenville Spinners Bicycle Safety Foundation assist in providing safety education and properly fitted helmets to children. The Bikeville coalition's Lights for Life program provides lights and reflective wear for low-income residents who do not have appropriate safety gear.

The needs analysis, including community input and collision analysis, for this Plan identified a need for bicycling education programs. Community members identified education classes as a way to reduce conflict and encourage more bicycling. Bicycle-related collision data shows that in addition to engineering improvements, education about riding on the right side of the road and how to comfortably ride in traffic may reduce bicycle related collisions. Individuals aged in the twenties and fifties are the two age groups most frequently involved in bicycle collisions in Greenville from 2005 to 2010, and, thus, suggest two leading target markets for education efforts. Feedback provided on the Bicycle Master Plan survey suggests a strong interest in adult and youth bicycle safety classes. Some interest was indicated for senior bicycle education, as well, though to a much lesser degree. The following outlines recommended education programs.

Adult Bicycling Skills Classes

The League of American Bicyclists (LAB) offers a curriculum for Smart Cycling courses that teach adults to ride their bicycles safely and confidently. The Smart Cycling courses are taught by League Certified Instructors (LCIs). Courses cover bicycle safety checks, fixing a flat, on-bike skills, crash avoidance techniques, and traffic negotiation.

There are currently five League-certified instructors in the Greenville area. A limited number of courses have been offered thus far in Greenville.

This Plan recommends the City of Greenville sponsor adult bicycling skills classes in the city on a bi-annual basis, at minimum. The City may also highlight local or nearby courses on its bicycling website and/ or coordinate with and support other local and regional organizations to offer such courses.

Sample programs: League of American Bicyclists <http://bikeleague.org/programs/education/courses.php>



Adult bicycle skills courses help bicyclists have the information and skills they need to avoid hazards and follow the law.

Senior Bicycle Education Classes

Senior bicycle education programs help older adults either re-learn bicycling or learn how to bicycle with less agility. Seniors who are no longer able to drive may still be able to bicycle shorter distances on either a regular two-wheeled bicycle or an adult tricycle. As one example, the Portland Parks and Recreation Department hosts a free senior tricycle program that provides tricycles to senior centers and takes folks on guided rides.

This Plan recommends the City collaborate with interested agencies, health departments, and senior centers to evaluate interest in senior bicycle education classes. If there is an interest in hosting such programs, the City should connect local agencies with partners in the area, such as the Greenville Spinners, the Southeastern Off-Road Bicycle Association, and the Greenville Bike Safety Foundation, who may be able to assist in developing and implementing senior bicycling activities.

Sample Program:

- Portland Senior Tricycle Program
<http://www.portlandonline.com/transportation/index.cfm?c=34772&a=155167>

Youth Bicycle Safety Education Classes

Typical school-based bicycle education programs educate students about the rules of the road, proper use of bicycle equipment, biking skills, street crossing skills, and the benefits of biking. Education programs can be part of a Safe Routes to School program. These types of education programs are usually sponsored by a joint City/school district committee that includes appointed parents, teachers, student representatives, administrators, police, active bicyclists, and engineering department staff.

This Plan recommends the City and local partners pursue a Safe Routes to School Program that includes annual youth bicycle safety education classes.

Sample programs:

- League of American Bicyclists: <http://www.bikeleague.org/programs/education/courses.php#kids>
- Bicycle Transportation Alliance – Portland, OR: <http://www.bta4bikes.org/resources/educational.php>

Family Day/Family Biking Classes

Family Bike Days and Family Biking Classes are great tools for educating and encouraging families to ride bicycles. Education trainings and encouragement events can include:

- "Freedom from Training Wheels" training
- How to carry kids by bicycle classes
- Safety checks and instruction
- Basic bike maintenance classes
- Bicycle Rodeos
- Bicycle Parades around parks and schools
- Organized family rides to child friendly locations such as the zoo or local parks

A family cycling class is organized through the Community Cycling Center in Portland, Oregon. They teach urban riding and bicycle maintenance over five weekly sessions. They work with families to help them achieve the goals of improving fitness, reducing pollution, and having more fun.

The San Francisco Bike Coalition organizes a "Freedom From Training Wheels" event. Families meet at a park and attempt to teach their children to ride their bicycles without training wheels. The fun and encouraging atmosphere helps bring confidence to children learning to ride on two wheels.



Youth bicycle safety education provides children with knowledge and training about safe and proper bicycle use.

It is recommended that the City of Greenville develop a family bicycling program.

Sample Programs:

- Portland, Oregon: <http://www.communitycyclingcenter.org/index.php/programs/classes/>
- San Francisco Bike Coalition: www.sfbike.org/freedom

5.2.3. Enforcement

Enforcement programs enforce legal and respectful use of the transportation network. The bicycle collision analysis and community identified needs indicate enforcement programs will help educate both motorists and bicyclists about the rules and responsibilities of the road.

The Greenville Police Department does not currently emphasize enforcement action against bicyclists, though if a crash involving a bicyclist occurs, the bicyclist may be ticketed. The City has partnered with the Palmetto Cycling Coalition to distribute small flyers that describe South Carolina traffic laws for bicyclists (in both Spanish and English). The following outlines recommended enforcement programs.

Bicycle Patrol

Police bicycle patrols not only increase the mobility of officers in dense areas but also provide law enforcement officers with an opportunity to display safe and legal bicycle skills. Bicycle patrols also show the community that the City is engaged in sustainable transportation. The Police Department deploys up to two bicycle patrol officers in the Downtown area on a regular basis. This Plan recommends the City continue its bicycle patrol in the Downtown area.

Speed Feedback Signs

Speed feedback signs display the speed of passing motor vehicles, with the expectation that motorists will slow down if they are aware of their speed. The Police Department operates several mobile speed feedback signs, which are deployed in response to resident complaints about speeding.

This Plan recommends the City include information on how to request a speed feedback sign on its bicycling resource website.

Targeted Enforcement

Targeted enforcement is focused efforts of police officers. For example, the Police Department conducts pedestrian stings at locations where pedestrians and motorists conflict and do not comply with traffic signals. Similar strategies may be applied to areas with bicycle traffic, however the Police Department has not implemented such strategies.

This Plan recommends the City's Police Department conduct targeted enforcement stings at locations known for noncompliance with traffic laws and at high conflict or high bicycle related collision areas.

Diversion Classes for Motorists and Bicyclists

Improving driver awareness of bicyclists helps to make a safer and more comfortable road environment for bicycling. Outreach through Drivers Ed classes is a good way to reach beginning drivers, while a diversion class can be offered to first-time offender violations that endanger bicyclists.

A diversion class can be aimed at motorists and bicyclists. In lieu of a citation and/or fine, individuals can take a one-time, free or inexpensive class instead. In Marin County, California, interested citizens can take the class even if they did not receive a ticket. This program is a good way to educate road users about bicycle rights and responsibilities, and can also increase public acceptance of enforcement actions.

Portland, Oregon offers a successful model for providing a diversion program for bicyclists who violate traffic laws, as well as motorists who violate traffic laws in relation to bicyclists.⁵ Other programs have been successful in Tempe, AZ; University of California at Davis; Huntington Beach, CA; and in Contra Costa County, CA. Bicyclist-targeted programs typically include the following strategies:⁶

- A bicyclist is ticketed for violating a traffic law.
- The bicyclist is provided information regarding the importance of observing bicycle traffic laws for the sake of safety, and is invited to attend a bicycle safety workshop (if the violator is a child, a letter with the same information is sent to the child's parent).
- If the bicyclist attends the workshop, the traffic ticket is voided.
- If the bicyclist does not attend the workshop (within a specific timeframe), the ticket is activated.

The first step of establishing a diversion program is to collaborate with the local police department and one or more local judges. Bicyclist-related diversion programs can often be developed in a format similar to existing diversion programs targeting other types of violations. Cities commonly use established League of American Bicyclist courses as qualified bicycle traffic safety classes, such as Tucson, Arizona, which refers traffic violators to a League Traffic Skills 101 (previously Road I) course.

Sample programs:

- Marin County, CA: <http://www.marinbike.org/Campaigns/ShareTheRoad/StreetSkills/Index.shtml>
- Tempe, AZ: <http://www.tempe.gov/court/bdc.htm>
- Portland, OR: <http://www.lifesaversconference.org/handouts2009/Morrison2.pdf> and <http://www.pedestrians.org/episodes/details121to150/Episode148.htm>
- Tucson, AZ: <http://www.tucsonaz.gov/prosecutor/Diversion/diversion.html>

5.2.4. Evaluation

Evaluation programs help the City measure how well it is meeting the goals of this plan, the Comprehensive Plan, and master plans that address the need to increase bicycle ridership. Evaluation is a key component of any engineering or programmatic investment.

Annual Count and Survey Program

Evaluation programs measure and evaluate the impact of projects, policies and programs. Typical evaluation programs range from a simple year over year comparison of U.S. Census Journey to Work data to bicycle counts and community surveys. Bicycle counts and community surveys act as methods to evaluate not only the impacts of specific bicycle improvement projects but can also function as a way to measure progress towards reaching City goals such as increased bicycle travel for trips one mile or less. Through the Bicycle

⁵ Source: City of Portland Office of Transportation. (2004). Pedestrian and Bicycle Enhanced Enforcement Project: Opportunity Analysis; <http://www.portlandonline.com/transportation/index.cfm?a=99325&c=34811>

⁶ Source: http://www.bicyclinginfo.org/bikesafe/case_studies/casestudy.cfm?CS_NUM=805

Master Plan process, the City of Greenville has already established baseline data and a tested methodology for collecting annual bicycle counts.

This Plan recommends, at minimum:

- Before and after bicycle and motor vehicle counts on all roadway and bikeway projects.
- Annual bicycle counts conducted at minimum at the 35 locations counted as part of this Master Plan effort.
- Annual community survey to evaluate bicycling activity, impacts of bicycle programs and facilities and to measure the City's progress towards reaching its goals.

Bicycle Staff Position

Because Greenville does not currently have a professional transportation planner on staff, this report recommends that the city hire a full-time transportation planner with expertise in the realm of bicycle and pedestrian planning. Doing so would address multiple high priority objectives for the City, while also taking a step closer to satisfying the need for increased bicycle and pedestrian staff. An in-house transportation planner would provide the City of Greenville with the necessary expertise for successfully finding a balance among all road users. Transportation planners have a unique capacity to address short- and long-term evaluation of infrastructure projects and funding.

Recognizing that bicycling in the City of Greenville is impacted by issues and opportunities in the greater Greenville region, the City should also work with the regional transportation planning agency, Greenville Pickens Area Transportation Study (GPATS), and its member communities to establish at least one position that focuses on active transportation modes for the greater planning area. GPATS's counterpart agency in the Spartanburg region, SPATS, has had at least one full time planner for multi-modal transportation issues since 2005.

Permanent Bicycle Advisory Committee

Many cities have an official Bicycle Advisory Committee made of citizen volunteers, appointed by City Council, to advise the city on bicycling issues. An advisory committee establishes the area's commitment to making bicycling and walking safer and more desirable, and has the potential to assist Greenville in getting funding for bicycle projects. Establishing a committee is also desirable for improving the city's Bicycle Friendly community designation.

The Bicycle Advisory Committee (BAC) should be composed of no more than 15 representatives, and no less than five. Representative bicycling stakeholder groups can include: road bicyclists, greenway cyclists, and mountain bicyclists. Because the needs of bicyclists and pedestrians are often very specific and very different, it is recommended that separate committees be established to focus on bicycle and pedestrian issues in the City. For the City of Greenville, a committee of nine members is recommended with the following breakdown of stakeholder representation:

- 1 - Greenville Spinners Cycling Club member
- 1 - Upstate SORBA member
- 1 - Safe Routes to School volunteer
- 1 - League Certified Instructor

- 1 - Bicycling industry representative
- 1 - Swamp Rabbit Trail user/advocate/liaison
- 2 - Commuter bicyclists with differing levels of cycling confidence/experience
- 1 - Other interest

The final seat of the committee, termed “other interest,” refers to a ninth committee member who may fill an additional niche in stakeholder interest, but who also maintains a strong interest in bicycling. Other stakeholder interests could include: public transit, environmental protection, persons with disabilities, senior citizens or low-income populations. Regardless of the additional stakeholder interest they provide, the final member should be a bicyclist and have knowledge of bicycling concerns and opportunities. The committee should reflect varying levels of bicycling experience and confidence, and, as with any public sector committee, should seek a level of member diversity that reflects the local population.

The charges of the BAC should include some or all of the following:

- Review and provide citizen input on capital project planning and design as it affects bicycling (e.g., corridor plans, street improvement projects, signing or signal projects, and parking facilities)
- Review and comment on changes to zoning, development code, comprehensive plans, and other long-term planning and policy documents
- Participate in the development, implementation, and evaluation of updates to the Bicycle Master Plan and bikeway facility standards
- Provide a formal liaison between local government, staff, and the public
- Develop and monitor goals and indices related to bicycling in the jurisdiction
- Promote bicycling, including bicycle safety and education

Because BAC members are volunteers, it is essential to have strong staffing supporting the committee in order for it to be successful. An agency staff person should be formally assigned to the BAC and should take charge of managing the application process, managing agendas and minutes, scheduling meetings, bringing agency issues to the BAC, and reporting back to the agency and governing body about the BAC’s recommendations and findings. As stated, the committee should be appointed by City Council and officially chartered as a commission of the council. The City of Beaver Creek, Ohio provides a useful example of a successful council-appointed BAC (<http://ci.beavercreek.oh.us/boards-commissions/bikeway-advisory/>).

Green Ribbon Advisory Committee

The Green Ribbon Advisory Committee’s purpose is to: *advise City Council, the City Manager, and other city staff on the development of programs and initiatives*, including the development of a “Sustainability and Climate Action Plan,” which will distinguish Greenville as a leader in sustainability efforts. As such, they have formed a “Mobility” Ad-hoc committee to address transportation issues. This Plan recommends that the Green Committee support bicycling as a valid form of transportation and a viable way to help reduce the City’s carbon footprint.

Apply to Become a Silver-Level Bicycle Friendly Community

As the Greenville bicycling community knows, the League of American Bicyclists has a well-respected Bicycle Friendly Communities (BFC) award program. Communities fill out a detailed application that covers bike-related facilities, plans, education efforts, promotion initiatives, and evaluation work that has been completed by the jurisdiction. The award is designed to recognize progress that has been made, as well as assist communities in identifying priority projects to improve bicycling conditions. Receiving the award is a media-worthy event, and may give elected officials the opportunity to receive media coverage for the positive work they are doing.

Greenville currently holds an award for Bronze BFC status. It is recommended that the City apply for Silver bicycle-friendly community status in 2013, upon making strides to implement the bicycle and trail improvements recommended in this Plan (see Appendix B).

5.2.5. Additional Resources

Program development can greatly benefit from examining similar efforts of other cities. Table 5-1 provides links to sample programs that are similar to programs recommended in the Plan.

Table 5-1. Additional program resources

Program Description	Link to sample program(s)
Share the Path event	http://www.portlandonline.com/shared/cfm/image.cfm?id=161457
Bike kitchen	http://www.bikekitchen.org/ http://www.bicyclekitchen.com/
Create-a-Commuter program	http://www.communitycyclingcenter.org/index.php/programs/create-a-commuter/
Bike parking at events	http://www.sfbike.org/?valet
Earn a Bike programs (for low-income kids)	http://www.experimentalstation.org/blackstone http://www.recycleabicycle.org/
Police Education Course	http://www.bicyclinginfo.org/enforcement/training.cfm http://www.massbike.org/police/
Walking School Buses (stand-alone program or part of SR2S program)	http://www.walkingschoolbus.org/
Bike Buddy program	http://bicycling.511.org/buddy.htm
Family day/family biking classes	http://www.sfbike.org/?family_day http://www.sfbike.org/?freedom
Women on Bikes program	http://www.portlandonline.com/transportation/index.cfm?a=iibhg&c=djdaa
I Share the Road campaign	http://www.isharetheroad.com/
Seniors on Bikes program (Safe Routes to Senior Centers, Older Adult Three-Wheeled Bicycle Program)	http://www.portlandonline.com/transportation/index.cfm?c=eafeg http://www.portlandonline.com/transportation/index.cfm?a=bffbgh&c=dheab
Sunday parkways (Ciclovias)	http://www.healthystreets.org/pages/sunday_parkways.htm
Bicycling Ambassadors	http://www.bicyclingambassadors.org/
Bike Commute Challenge	http://www.bikecommutechallenge.com/
Bike Light Campaign	http://www.portlandonline.com/transportation/index.cfm?&c=deibb&a=bebfjh

5.3. Policy Recommendations

Policy recommendations for Greenville are informed by a review of existing plans and relevant ordinances (Appendix A), a needs analysis (Chapter 4), an institutional review, and community interests revealed through the public process. The policies of the City of Greenville that support bicycling for transportation and recreation have progressed well beyond many other small cities. The City of Greenville has adopted a strong Complete Streets Resolution, amended engineering design guidelines to properly incorporate bicycling principles, and established a bicycle parking ordinance. As is recommended, Greenville does not have a local mandatory helmet law (such ordinances have been shown to decrease bicycle usage).

In order to maintain the bicycle-friendliness of the community as it grows in size and to achieve a higher-level designation as a Bicycle Friendly Community, Greenville will need to continue to codify its support for accommodating bicyclists on roadways, on trails, and at end-of-trip facilities.

Examples of existing city policies related to bicyclists (cited verbatim, as recorded in *Public Policies for Pedestrian and Bicyclist Safety and Mobility*)⁷:

- **Charlotte, North Carolina** (Zoning Ordinance - Off-street parking and loading): The City will provide bicycle parking in all City garages and encourage bicycle parking in private garages.
- **Portland, Oregon** (Portland Bicycle Plan for 2030): Encourage the provision of showers and changing facilities for commuting cyclists, including the development of such facilities in commercial buildings and at central locations.
- **Minneapolis, Minnesota** (The Metropolitan Council 2030 Transportation Policy Plan): To encourage a strong intermodal link, the policy for all transit modes, including light-rail transit and commuter rail, will be to allow bicycles on board.
- **Seattle, Washington** (Seattle Comprehensive Plan 2004-2024): Develop, apply, and report on walking and bicycling transportation performance measures in the Transportation Strategic Plan to evaluate the functioning of the non-motorized transportation system; to ensure consistency with current industry standards; to identify strengths, deficiencies, and potential improvements; and to support development of new and innovative facilities and programs.
- **Charlotte, North Carolina** (City of Charlotte Bicycle Plan): The City will encourage Mecklenburg County Schools to implement a bicycle education curriculum in local schools.
- **Madison, Wisconsin** (Platinum Biking City Plan 2008): Create a formal bicycle program, with an identified program coordinator, within the Madison Police Department to standardize police bicycle operations and to increase the degree to which bicycles are used as a mode of transport by police personnel for general enforcement as well as for bicycle/pedestrian enforcement.

5.3.1. Funding Policy

Public funding for bicycle facilities is a crucial component of local policy. The City of Greenville currently provides annual funding for bicycle projects, though at a limited level. By establishing a funding policy, the City can ensure that consistent funding is available for improving Greenville's bicycle-friendliness. Additionally, such a policy can help to ensure equitable distribution of the funds. In the Visions and Goals of the Bicycle Master Plan, Greenville stated that "equity" in bicycle planning is a central principle.

⁷ U.S. Department of Transportation. (August 2010). *Public policies for pedestrian and bicyclist safety and mobility*.

Sample policy:

Nashville, Tennessee (population over 600,000) recently established a model program for determining local funding allotments. By virtue of a policy established by the metropolitan planning organization (MPO) Executive Board, 15 percent of Surface Transportation Program (STP) funds are set aside annually for active transportation projects. For the current funding cycle (2011 to 2015), that amounts to roughly \$2.5 million that will be used exclusively for bicycle and pedestrian infrastructure and education costs. That figure does not reflect additional funds allotted for bicycle and pedestrian facilities that are incorporated into other, larger projects (such as a road widening project that may include a sidewalk and bike lane).⁸

5.3.2. Bicycle Parking Policy

The City of Greenville's Bicycle Parking ordinance currently requires a minimum of two bicycle parking spaces for all new developments within the City. Additionally, it requires that the bicycle parking spaces provided at the site must equal a minimum of ten percent of the first 100 off-street parking spaces, plus one percent of those spaces exceeding 100. A reduction in automobile parking requirements is available based on additions of bicycle parking spaces. Basic standards for the type and location of bicycle racks is included in the ordinance, as well.

5.3.3. Long-Term Bicycle Parking

Bicycle storage can range from a simple and convenient bicycle rack to storage in a bicycle locker or cage that protects against weather, vandalism, and theft. The latter is generally referred to as long-term bicycle parking, while the former is used for short-term bicycle parking. Greenville's current bicycle parking ordinance does not address long-term bicycle parking needs. Through the Bicycle Master Plan public process, citizens have expressed an interest in using bicycle lockers for long-term bicycle parking and have also suggested specific locations where long-term bicycle parking should be implemented.

The following outlines recommendations related to long-term bicycle parking:

Define the two types of parking. Sample language:⁹

- (a) Long-term Bicycle Parking. Each long-term bicycle parking space shall consist of a locker or locked enclosure, such as a secure room or controlled access area, providing protection for each bicycle from theft, vandalism, and weather. Long-term bicycle parking is meant to accommodate employees, students, residents, commuters, and others expected to park more than two hours.
- (b) Short-term Bicycle Parking. Short-term bicycle parking shall consist of a bicycle rack or racks and is meant to accommodate visitors, customers, messengers, and others expected to park not more than two hours.

⁸ Nashville Area Metropolitan Planning Organization. (August 2010). *2035 Regional Transportation Plan: Urban Surface Transportation Program Investment Strategy*.

⁹ Sample language borrowed from San Mateo, California recommended policies drafted by Alta Planning + Design.

Alternatively, bicycle parking facilities can be classified. Sample language:¹⁰

- (a) **Class I Facilities.** Intended for long-term parking; protects against theft of entire bicycle and of its components and accessories. The facility must also protect the bicycle from inclement weather, including wind-driven rain. Three design alternatives for Class I facilities are as follows:
- a. *Bicycle Locker.* A fully enclosed space accessible only by the owner or operator of the bicycle. Bicycle lockers may be pre-manufactured or designed for individual sites. All bicycle lockers must be fitted with key locking mechanisms. In multiple-family developments, the Class I bicycle parking and required storage area for each dwelling unit may be combined into one locked multi-use storage facility provided that the total space requirement shall be the sum of the requirements for each use computed separately. The preferred Class I facility is a bicycle locker. Restricted access facilities and enclosed cages may be considered as alternatives to bicycle lockers as indicated below. Class I facilities other than lockers, restricted access rooms, or enclosed cages, but providing the same level of security, may be approved by senior planning staff.
 - b. *Restricted Access.* Class II bicycle parking facilities located within a locked room or locked enclosure accessible only to the owners or operators of the bicycles parked within. The maximum capacity of each restricted room or enclosure shall be ten (10) bicycles. An additional locked room or enclosure is required for each maximum increment of ten additional bicycles. The doors of such restricted access enclosures must be fitted with key locking mechanisms. In multiple-family residential developments, a common locked garage area with Class II bicycle parking facilities shall be deemed restricted access provided the garage is accessible only to the residents of the units for whom the garage is provided.
 - c. *Enclosed Cages.* A fully enclosed chain link enclosure for individual bicycles, where contents are visible from the outside, and which can be locked by a user-provided lock. The locking mechanism must accept a 3/8" diameter padlock. This type of facility is only to be used for retail and service uses and multiple family developments.
- (b) **Class II Facilities.** Intended for short term parking. A stationary object to which the user can lock the frame and both wheels with only a lock furnished by the user. The facility shall be designed so that the lock is protected from physical assault. A Class II rack must accept padlocks and high security U-shaped locks.
- (c) **Class III Facilities.** Intended for short term parking. A stationary object to which the user can lock the frame and both wheels with a user-provided cable or chain (6 foot) and lock. All Class III facilities must be located at street floor level.

¹⁰ Sample language borrowed from Oakland, California recommended policies drafted by Alta Planning + Design.

Establish specifications for long-term parking. Sample language:

All required long-term bicycle parking spaces, with the exception of bicycle lockers, shall permit the locking of the bicycle frame and one wheel with a U-type lock and support the bicycle in a stable position without damage to wheels, frame, or components.

Bicycle parking facilities shall be securely anchored so they cannot be easily removed and shall be of sufficient strength and design to resist vandalism and theft.

Long-term bicycle parking shall be covered and shall be located on site or within two hundred (200) feet of the main building entrance. The main building entrance excludes garage entrances, trash room entrances, and other building entrances that are not publicly accessible.

5.3.4. Large Event Bicycle Parking

Greenville's Bicycle Friendly Community program, Bikeville, provides a bicycle valet service at many downtown events and festivals. Community feedback supports this practice and recognizes bike valet as a successful encouragement program. The City of Greenville should consider an amendment to its existing special event permitting process that incorporates special event bicycle parking as a requirement for permit approval.

The following provides sample language for a special events bicycle parking policy:¹¹

Define special event bicycle parking.

"Attended bicycle parking" means a service provided by the event sponsor or qualified bicycle parking service provider where at least one attendant is present throughout the event to receive, return and guard bicycles, and where a safe and sufficiently large area has been set aside for event attendees to leave their bicycles.

Establish conditional special event permitting.

Requiring the event promoter to provide attended bike parking service for events that expect 5,000 or more attendees, and for smaller events at the discretion of the Chief of Police. The promoter must advertise the service to potential attendees in all outreach and advertising materials and media, and place the bike parking area in an accessible location.

¹¹ Sample language borrowed from Palo Alto, California recommended policies drafted by Alta Planning + Design.